

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P236951

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236951  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-180-D-U-T2R-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17371.1 lumens  
Efficiency: N/A  
Efficacy: 96.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

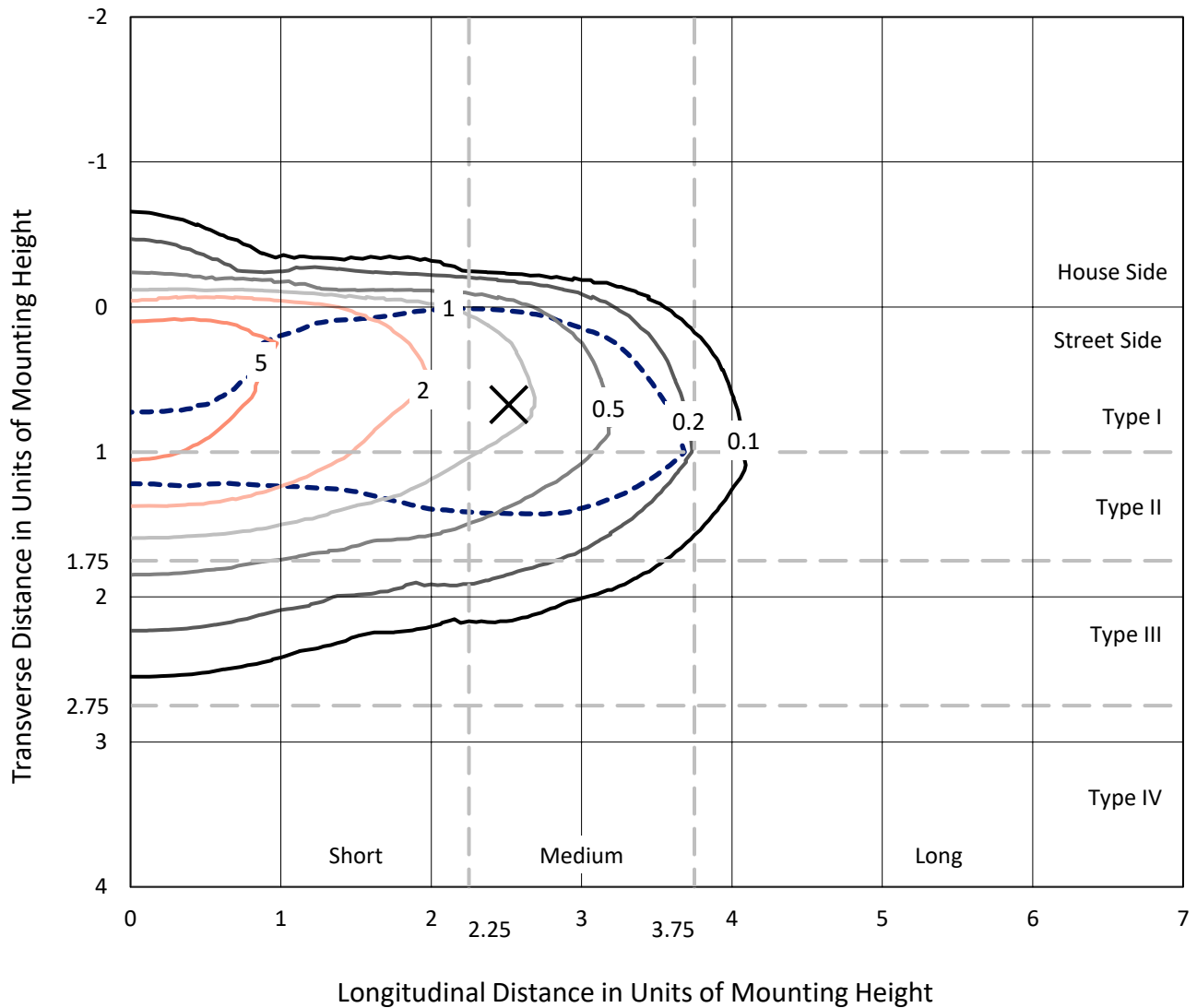
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

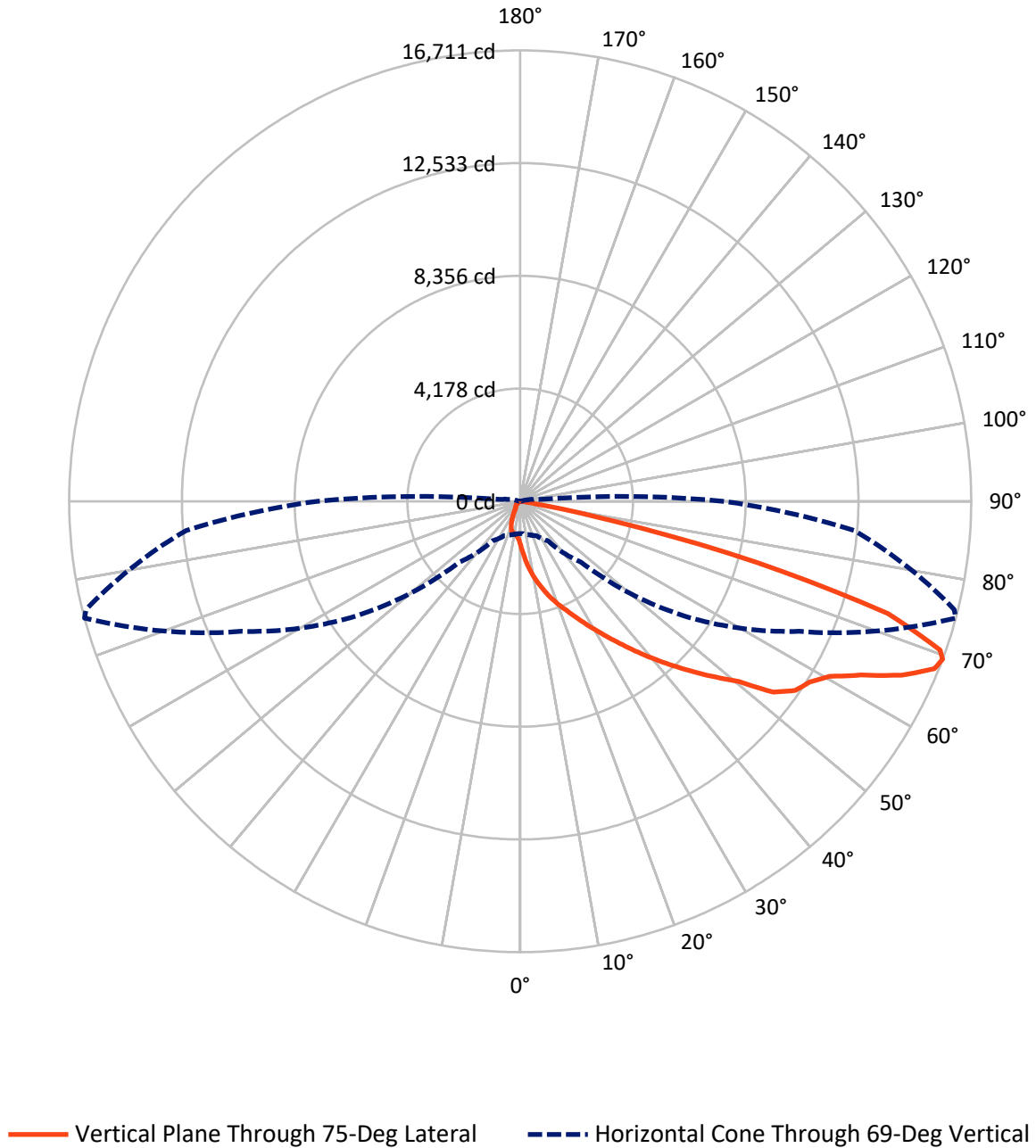
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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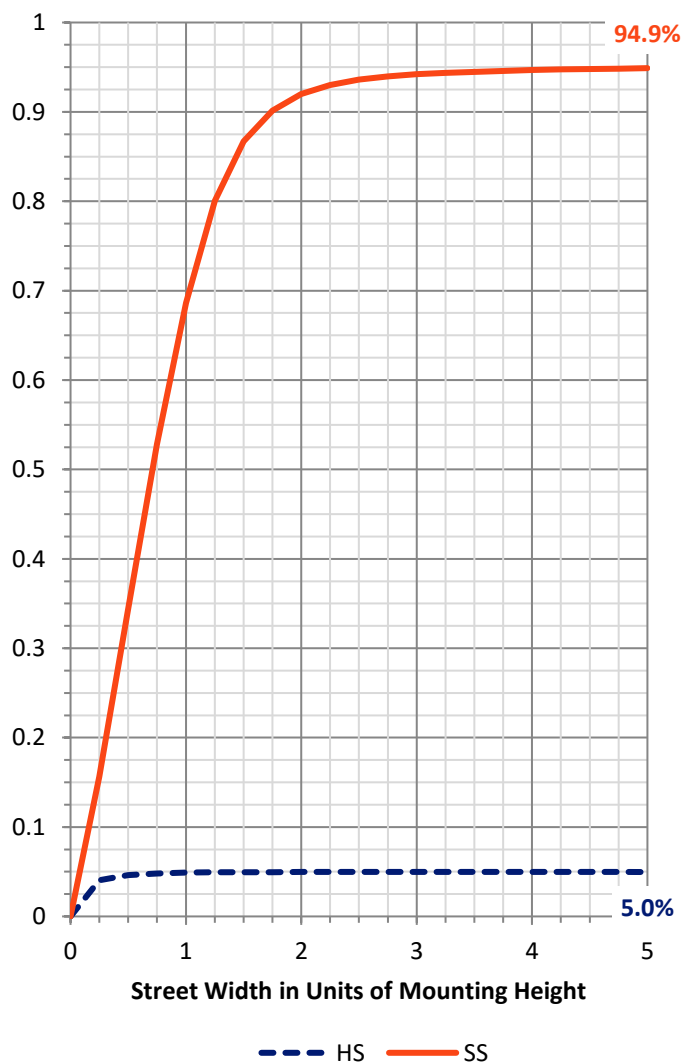
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	866.7	0.0	866.7
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	16504.4	0.0	16504.4
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	17371.1	0.0	17371.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.5	1.1
10°-20°	673.8	3.9
20°-30°	1286.4	7.4
30°-40°	2307.5	13.3
40°-50°	3535.3	20.4
50°-60°	4108.9	23.7
60°-70°	3638.5	20.9
70°-80°	1569.4	9.0
80°-90°	62.9	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	17371.1	100.0
0°-180°	17371.1	100.0

**Coefficient of Utilization**



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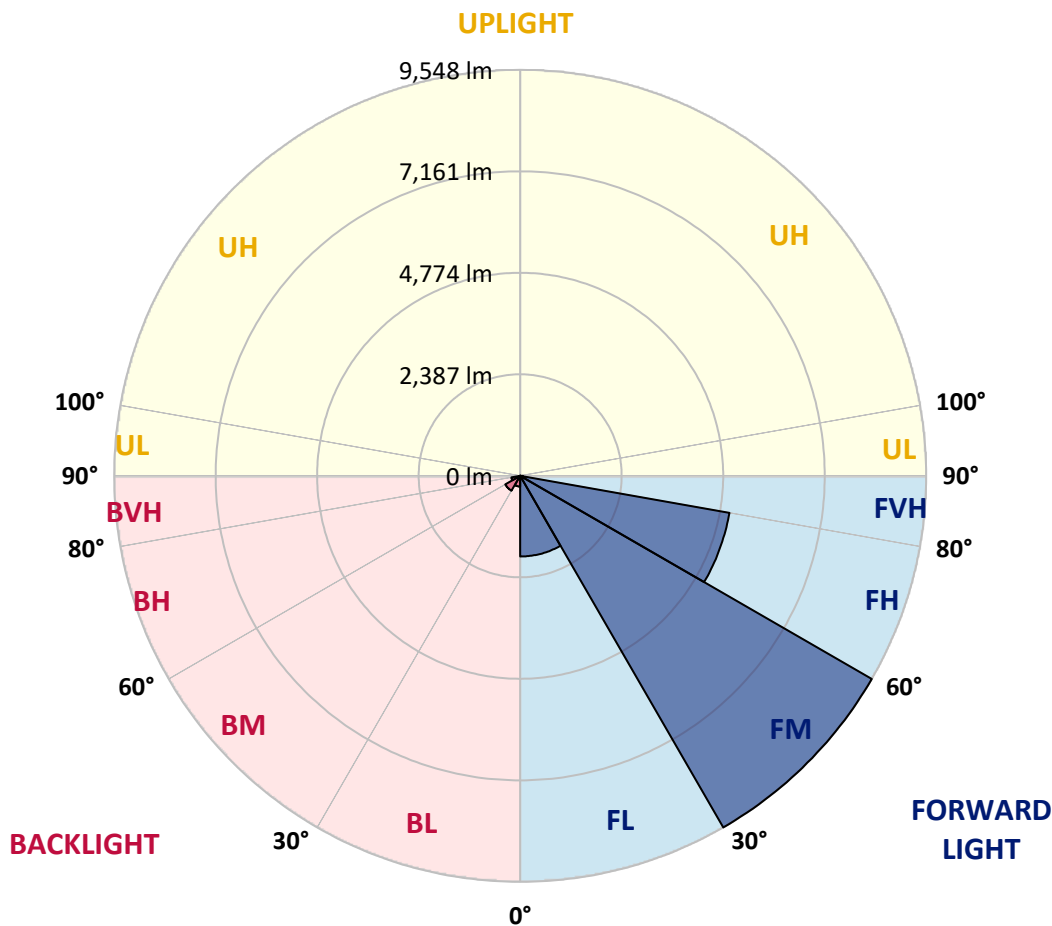
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1897.0	10.9			
FM (30°-60°)	9547.6	55.0			
FH (60°-80°)	4997.9	28.8			G2/5000
FVH (80°-90°)	62.0	0.4			G1/100
BL (0°-30°)	251.7	1.4	B1/500		
BM (30°-60°)	404.1	2.3	B1/1000		
BH (60°-80°)	210.0	1.2	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4
2.5°	2662.7	2636.4	2610.2	2580.1	2512.8	2396.5	2250.2	2092.7	1897.7	1863.9	1706.4
5°	3232.8	3221.5	3195.3	3154.0	3079.0	2951.5	2786.4	2553.9	2227.7	2171.4	1837.6
7.5°	3634.1	3626.6	3604.0	3555.3	3487.8	3360.3	3187.7	2936.5	2557.6	2494.0	2002.6
10°	3994.1	3990.3	3971.6	3926.6	3859.0	3720.3	3536.5	3274.0	2872.8	2801.5	2193.9
12.5°	4320.3	4324.1	4316.7	4294.1	4245.4	4114.0	3904.1	3619.0	3176.5	3097.7	2422.8
15°	4511.7	4522.9	4552.9	4597.8	4612.8	4507.8	4290.3	3975.3	3487.8	3420.3	2685.3
17.5°	4447.8	4459.1	4552.9	4706.7	4852.9	4867.9	4672.9	4312.8	3795.3	3727.8	2944.0
20°	4294.1	4309.0	4406.7	4616.6	4901.6	5100.4	5021.7	4680.3	4087.8	4005.3	3191.5
22.5°	4466.6	4466.6	4496.6	4624.1	4882.9	5194.1	5299.2	5047.9	4387.9	4286.6	3439.1
25°	5059.1	5047.9	4984.2	4931.6	5014.1	5291.7	5509.2	5423.0	4740.3	4624.1	3701.6
27.5°	5809.2	5861.8	5741.7	5550.5	5362.9	5482.9	5696.7	5794.2	5130.4	5010.4	3971.6
30°	6649.3	6671.8	6529.3	6274.2	5944.2	5828.0	5917.9	6112.9	5554.2	5423.0	4252.8
32.5°	7406.8	7388.1	7268.0	7001.8	6593.0	6341.7	6202.9	6367.9	6015.5	5865.5	4541.6
35°	8078.1	8093.2	7946.9	7639.3	7238.1	6971.9	6641.8	6656.7	6533.0	6360.5	4875.3
37.5°	8682.0	8655.6	8516.9	8209.4	7845.6	7556.8	7208.1	6956.7	7099.3	6919.3	5250.5
40°	9173.2	9146.9	9000.7	8700.7	8359.4	8123.1	7849.4	7358.1	7695.5	7489.2	5651.7
42.5°	9563.3	9533.2	9409.5	9120.8	8790.7	8580.6	8449.4	7853.1	8333.2	8126.9	6101.7
45°	9754.5	9728.2	9653.3	9435.7	9146.9	8963.2	9027.0	8423.2	9015.7	8843.2	6596.7
47.5°	9529.5	9518.2	9604.6	9567.0	9402.0	9304.5	9525.8	9045.7	9732.0	9563.3	7166.9
50°	8846.9	8865.8	9116.9	9428.2	9506.9	9623.2	9934.5	9702.0	10500.8	10320.8	7823.1
52.5°	7163.0	7290.6	8048.1	8798.2	9379.5	9818.2	10414.6	10639.5	11753.4	11577.1	8846.9
55°	5347.9	5400.4	6225.5	7508.1	8865.8	9803.3	10770.9	11190.9	12372.2	12192.2	9116.9
57.5°	4241.6	4260.3	4669.0	5978.0	7808.1	9465.7	10958.3	11389.6	12642.3	12492.2	9518.2
60°	3330.2	3352.7	3649.0	4549.1	6319.2	8554.5	10688.3	11562.2	13170.9	13051.0	10219.6
62.5°	2591.4	2613.9	2794.0	3322.8	4740.3	7151.8	10144.5	11839.7	14176.1	14119.9	11367.2
65°	2006.4	2013.8	2137.6	2385.2	3349.1	5633.0	9480.8	12098.5	15533.7	15485.0	12297.2
67.5°	1481.3	1492.6	1578.9	1732.7	2261.4	4046.5	8393.2	11899.7	16557.5	16415.0	12634.7
69°	1196.4	1207.7	1282.6	1406.3	1785.2	3187.7	7399.4	11408.5	16711.3	16576.3	12421.0
70°	1023.9	1031.3	1106.4	1211.3	1522.6	2707.7	6611.9	10984.6	16508.7	16377.5	11933.4
72.5°	656.3	693.8	768.8	836.3	1008.8	1792.6	4462.8	9109.5	14243.6	14018.6	9345.7
75°	363.8	375.0	510.0	592.5	671.3	1166.4	2482.7	5681.7	9060.8	8903.2	4999.1
77.5°	300.0	307.6	360.0	450.0	450.0	652.6	937.6	2238.9	3446.5	3109.0	1353.8
80°	210.0	217.5	273.8	296.3	322.6	367.5	303.7	491.3	532.5	472.5	202.5
82.5°	146.3	153.7	187.5	243.7	258.7	172.5	112.5	146.3	153.7	153.7	78.7
85°	26.2	37.4	138.8	202.5	153.7	52.6	63.8	52.6	48.7	52.6	18.8
87.5°	0.0	0.0	86.2	97.5	82.5	22.5	26.2	18.8	11.3	15.0	7.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4	1616.4
2.5°	1627.6	1548.9	1413.9	1316.3	1233.9	1170.0	1143.8	1102.5	1072.6	1087.5	1068.9
5°	1672.6	1533.9	1316.3	1177.6	1080.1	997.5	930.2	877.6	836.3	828.8	821.3
7.5°	1743.9	1545.2	1260.1	1087.5	941.4	813.8	708.8	630.1	570.0	570.0	547.5
10°	1841.3	1575.1	1226.3	997.5	780.1	607.6	502.6	427.5	397.4	393.8	386.2
12.5°	1976.4	1631.4	1200.1	881.2	607.6	442.5	378.8	352.6	341.3	337.5	333.8
15°	2160.2	1713.8	1170.0	738.8	461.3	363.8	337.5	315.0	303.7	300.0	296.3
17.5°	2336.4	1788.9	1106.4	592.5	375.0	330.1	300.0	281.3	266.3	262.6	262.6
20°	2501.5	1852.6	997.5	461.3	337.5	296.3	266.3	243.7	228.8	225.0	225.0
22.5°	2674.0	1905.2	862.6	375.0	307.6	262.6	232.5	210.0	195.0	191.3	187.5
25°	2857.6	1942.6	708.8	333.8	277.5	232.5	198.8	180.1	168.8	165.0	161.2
27.5°	3056.5	1957.7	562.5	303.7	243.7	202.5	172.5	153.7	146.3	142.5	142.5
30°	3236.5	1942.6	435.1	270.0	213.8	176.2	150.0	135.1	127.5	123.8	123.8
32.5°	3423.9	1905.2	348.7	240.1	187.5	150.0	127.5	116.3	112.5	108.7	108.7
35°	3622.8	1856.5	300.0	213.8	161.2	131.2	112.5	105.0	101.3	97.5	97.5
37.5°	3855.3	1796.4	273.8	191.3	142.5	116.3	97.5	93.8	90.0	90.0	90.0
40°	4117.9	1721.4	255.0	172.5	127.5	101.3	86.2	82.5	78.7	78.7	78.7
42.5°	4395.4	1635.2	236.2	153.7	112.5	86.2	75.0	75.0	71.2	71.2	67.5
45°	4706.7	1548.9	217.5	135.1	97.5	75.0	63.8	60.0	60.0	56.3	56.3
47.5°	5074.1	1470.1	198.8	119.9	86.2	63.8	56.3	52.6	48.7	45.1	45.1
50°	5591.7	1462.7	176.2	105.0	78.7	52.6	45.1	41.3	37.4	33.8	33.8
52.5°	6105.5	1395.1	150.0	86.2	63.8	45.1	33.8	30.0	26.2	26.2	22.5
55°	6221.8	1282.6	131.2	75.0	48.7	33.8	26.2	18.8	18.8	15.0	15.0
57.5°	6476.8	1230.1	112.5	60.0	37.4	26.2	15.0	11.3	11.3	11.3	11.3
60°	6979.3	1215.1	97.5	52.6	26.2	18.8	11.3	7.5	7.5	3.8	3.8
62.5°	7673.1	1200.1	82.5	45.1	18.8	11.3	7.5	3.8	0.0	0.0	0.0
65°	8055.6	1098.8	67.5	33.8	15.0	11.3	3.8	0.0	0.0	0.0	0.0
67.5°	7954.4	907.6	60.0	22.5	11.3	7.5	3.8	0.0	0.0	0.0	0.0
69°	7530.5	765.1	48.7	18.8	11.3	7.5	3.8	0.0	0.0	0.0	0.0
70°	7020.6	660.0	45.1	15.0	7.5	3.8	3.8	0.0	0.0	0.0	0.0
72.5°	4984.2	345.0	30.0	11.3	7.5	3.8	0.0	0.0	0.0	0.0	0.0
75°	2329.0	153.7	18.8	7.5	3.8	3.8	0.0	0.0	0.0	0.0	0.0
77.5°	513.7	71.2	11.3	7.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	97.5	26.2	7.5	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.8	11.3	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)